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Transitivity markers in West Himalayish: synchronic and diachronic considerations

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The present paper describes a transitivity distinction that is attested in some Tibeto-Burman (TB) languages of the West Himalayish (WH) subgroup. The relevant distinction is encoded by a set of dedicated markers that occur between verb stems and inflectional endings and group verb into transitivity classes. The paper first offers a synchronic description of transitivity classes in the WH language Bunan, discussing their formal realization and functional motivation. Subsequently, the relevant transitivity classes are discussed from a historical-comparative perspective. It is argued that the transitivity distinction developed when an object agreement marker was reanalyzed as a marker of transitive verbs. The paper thus offers new perspectives on transitivity in TB from both a synchronic and a diacronic point of view, and adduces evidence for a hitherto underscribed reanalysis from "object agreement marker" > "marker of transitive verbs".

Keywords: Tibeto-Burman, historical linguistics, transitivity, object agreement, reanalysis

1 Introduction

In various Tibeto-Burman (TB) languages, verbal morphology is sensitive to distinctions in terms of transitivity. These distinctions are most obvious in languages with complex agreement systems, in which intransitive and transitive verbs commonly follow different inflectional patterns, e.g. Japhug (Jacques 2004: 337–338), Kham (Watters 2002: 78–79), or Limbu (van Driem 1987: 74). However, transitivity distinctions can also manifest themselves in other ways. In Dolakha Newar, for example, intransitive and transitive verbs are subject to different morphophonological alternations in certain grammatical contexts (Genetti 2007: 167, 177–186), while in Classical Tibetan, transitive verbs show more complex stem alternations than intransitive verbs (Beyer 1992: 164).

This article discusses a type of transitivity distinction that is attested in certain West Himalayish (WH) languages, but otherwise appears to be rare in TB. The relevant transitivity distinction is expressed by a set of suffixes that occur between verb stems and inflectional endings and serve the purpose of indexing a verb's transitivity class. The morphological pattern is illustrated in Figure 1 below.

Figure 1: A schematic morphological representation of the WH transitivity distinction

VERB STEM – TRANSITIVITY – TAME / AGREEMENT

The article has the following structure: § 2 discusses some crucial terminological concepts and gives an overview of the WH subgroup. § 3 describes the transitivity class system of the WH language

Bunan from a synchronic perspective. § 4 discusses the transitivity classes in WH from a historical-comparative perspective. The section relates the transitivity class system of Bunan to similar systems in closely related WH languages, describes similar phenomena in more distantly related languages, and argues that the WH transitivity markers developped from object agreement markers. § 6, finally, summarizes the findings of this article.

2 Preliminaries

2.1 Transitivity as a verbal category

Transitivity is a multifaceted notion that manifests itself in the form of a broad range of grammatical phenomena such as case marking, verb agreement, and voice. The present study focuses on a lesser-known morphosyntactic manifestation of transitivity, viz. the marking of transitivity on verbs with a set of suffixes that divide verbs into transitivity classes.

In what follows, the term "transitivity" is exclusively used to refer to this grammatical phenomenon, i.e. the manifestation of transitivity as a morphological category on verbs. The terms "transitive" and "intransitive", in turn, are consistently used as labels for verbal transitivity classes.

The functional motivation of such transitivity classes can be based on different notions of transitivity. In some languages, transitivity class membership rests on a binary syntactic notion of transitivity in the sense of Dixon (2010: 116). In such systems, verbs are grouped into transitivity classes based on their number of core arguments. In other languages, transitivity membership is based on a scalar semantic notion of transitivity in the sense of Hopper & Thompson (1980). In such systems, verbs are grouped into transitivity classes based on semantic properties that are associated with either high or low transitivity. As the functional motivation of transitivity classes may vary across languages, the present study does not commit to one single definition of transitivity. Rather, the study acknowledges that transitivity has a syntactic and a semantic dimension, both of which necessary for describing verbal transitivity classes in different languages. Whether the term "transitivitiy" and its hyponyms "transitive" and "intransitive" are to be understood in a syntactic or a semantic sense thus depends on the grammatical conventions of a language.

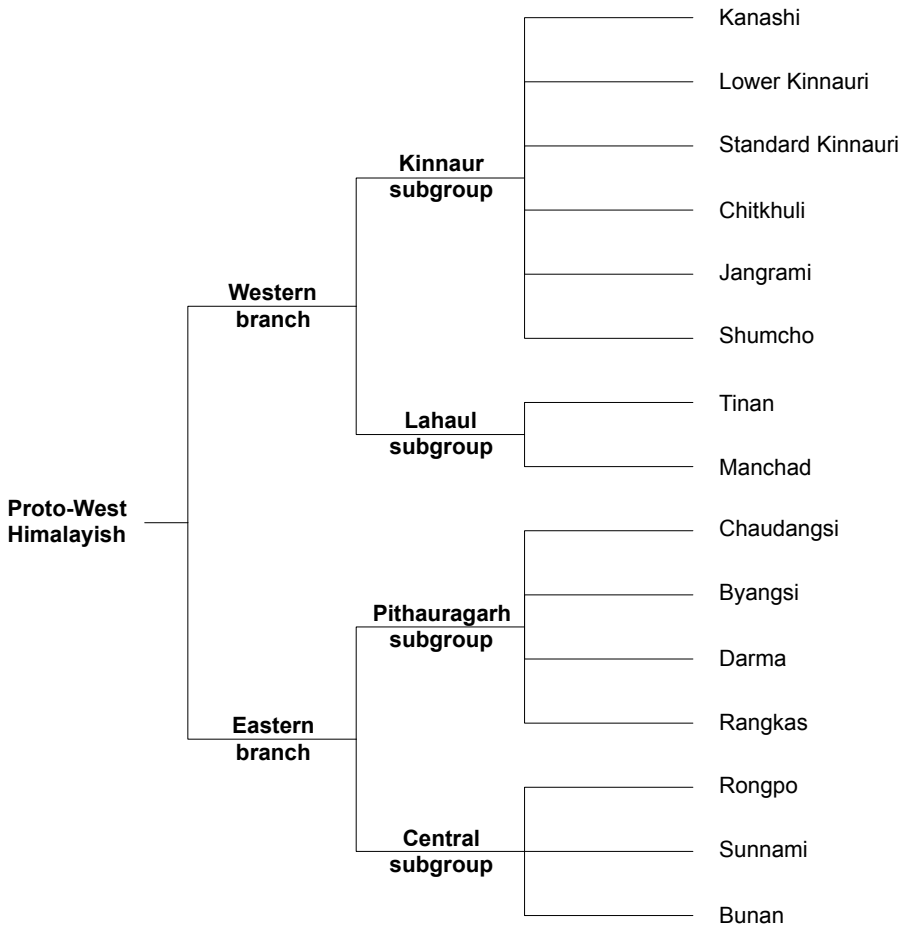
Since the terms "transitive" and "intransitive" are used as labels for transitivity classes in the remainder of this article, it is helpful to introduce a second term to refer to a verb's number of core arguments irrespective of its transitivity class membership. For this purpose, the term "valence" will be used. Following established terminology, verbs with one, two, and three core arguments are referred to as "monovalent", "bivalent", and "trivalent". Verbs belonging to the latter two classes are sometimes referred to as "plurivalent".

2.2 The WH languages

The WH languages are a group of fifteen TB languages that are spoken in the North Indian Himalayas in the states of Himachal Pradesh and Uttarakhand. Figure 2 below gives the most recent classification

by Widmer (2017a), which is based on a comparative study of selected lexical items from the basic vocabulary.

Figure 2: The classification of WH according to Widmer (2017a)



Widmer's (2017a) model is almost identical with an earlier classification by Nishi (1991) but more comprehensive than the latter in that it takes into account more languages.[1] Both Widmer (2017a) and Nishi (1991) can in turn be considered as extended and updated versions of the classification by Shafer (1967). Shafer had largely recognized the WH subgroups postulated by Widmer (2017a) and Nishi (1991), but also classified Raji-Raute ("Dźangali"), Thangmi ("Thami") and Barām ("Bhramu") as WH languages. Recent comparative studies, however, suggest that Raji-Raute as well as Thangmi and Barām are more closely affiliated with Kiranti and Magaric (van Driem 2001: 769; Pons 2017).

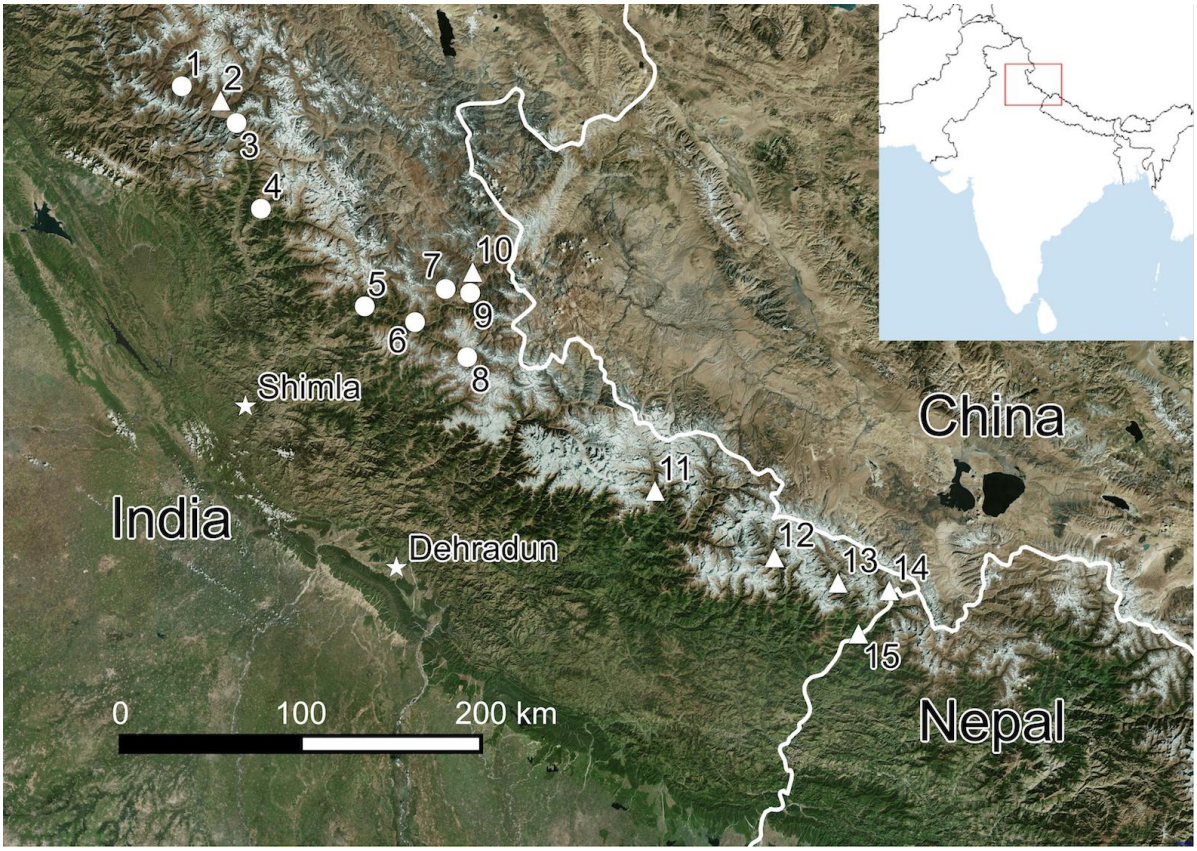
Note that there are various other versions of the WH *Stammbaum* such as the classifications by Konow (Grierson 1909), Benedict (1972), Bradley (1997), and Thurgood (2003). These models have in common that they primarily classify languages according to their geographical location. In the case of WH, such an approach is problematic, as some closely related languages are spoken at a

[1] Nishi's (1991) classification did not include the languages Jangrami and Shumcho, who were first described as independent languages by Huber (2011). Earlier studies such as Bailey (1909), Nishi (1991), or van Driem (2001: 939) treated the WH languages of Upper Kinnaur (i.e. Jangrami, Shumcho, and Sunnami) as one single language with the name "Thĕbörskad‘" or "Thebor".

considerable distance from each other. This is especially true for the languages belonging to the Central subgroup, i.e. Bunan, Sunnami, and Rongpo (see Figure 3 below). As a consequence, the relevant classifications fail to capture certain aspects of the WH phylogeny.

Figure 3 below gives an overview of the area in which WH languages are spoken. The languages belonging to the western branch of WH are indexed with circles, whereas the languages pertaining to the eastern branch of WH are indexed with triangles.

Figure 3: The geographical distribution of WH languages



1	Manchad	6	Standard Kinnauri	11	Rongpo
2	Bunan	7	Jangrami	12	Rangkas (extinct)
3	Tinan	8	Chitkhuli	13	Darma
4	Kanashi	9	Shumcho	14	Byangsi
5	Lower Kinnauri	10	Sunnami	15	Chaudangsi

3 Transitivity classes in Bunan

This section gives a brief overview of the transitivity class system of Bunan, a WH language that is spoken by approximately 4,000 people in Himachal Pradesh. The Bunan data presented in this paper were gathered by myself between 2010 and 2016 during five fieldtrips with a total duration of little

more than 11 months. My data corpus comprises elicited data as well as recordings of traditional stories and everyday conversations (see Widmer 2017a: 53–57 for a more elaborate discussion of the data corpus).

3.1 The morphological structure of the Bunan verb

From a comparative TB perspective, Bunan verbal morphology is moderately complex. The morphological template of a verb form has five slots, with one preceding the verb root and four following it. Since the preverbal slot is not relevant for the present paper, it will not be discussed any further here. The following table gives an overview of the morphological slots that follow the verb root.

Table 1: The morphological template of a Bunan verb (excluding prefixes and non-productive derivational morphology)

Root	Slot 1 Derivational suffixes	Slot 2 Transitivity markers	Slot 3 Inflectional suffixes	Slot 4 Inflectional suffixes
	▪ detransitive	▪ intransitive ▪ middle ▪ transitive	▪ egophoricity (secondary)	▪ tense ▪ mood ▪ evidentiality ▪ egophoricity (primary) ▪ number ▪ person

As the table illustrates, there are two slots for inflectional categories, i.e. slot 3 and slot 4. Slot 3, which hosts secondary egophoricity markers, has almost become obsolete in contemporary Bunan. That is because secondary egophoricity marking only occurs in one specific past tense construction in the conservative variety spoken by old speakers. The following discussion primarily focuses on the morphemes that occur in slot 2, i.e. transitivity markers. Bunan distinguishes three transitivity classes, which are discussed in the following section in more detail.

3.2 The three transitivity classes of Bunan

3.2.1 The morphological alternations

Every Bunan verb belongs to one of three transitivity classes, which are referred to as “intransitive”, “middle”, and “transitive” in the folowing. The distinction between the three transitivity classes pervades the verbal system and manifests itself in numerous different constructions. Depending on the construction in which a verb is used, the morphological difference between transitivity classes is expressed in a different manner. There are seven major morphological patterns, which arise from the interplay of two variables: (i) the presence or absence of a transitivity class marker in slot 2 and (ii) allomorphic alternations in slot 3 that are caused by transitivity class markers in slot 2. The following table gives an overview of the different morphological patterns. The symbol

'–' indicates that the relevant transitivity class is not marked in the relevant construction, while the symbol 'Ø' indicates that the relevant transitivity class is marked by a zero morpheme, which causes phonological / allomorphic alternations in slot 4.

Table 2: The seven morphological patterns

PATTERN	INTRANSITIVE	MIDDLE	TRANSITIVE	CONSTRUCTIONS
1	***-k-***	***-ɛ-***	***-tɛ-***	present
2	–	***-ɛ-***	***-Ø-***	direct allophoric past, perfective converb
3	–	***-ɛ-***	–	imperfective converb, volitional mood, consultative mood
4	***-k-*** + allomorph A	***-ɛ-*** + allomorph A	***-Ø-*** + allomorph B	egophoric future
5	– + allomorph A	***-ɛ-*** + allomorph B	***-tɛ-*** + allomorph B	infinitive, supine, active participle
6	– + allomorph A	***-ɛ-*** + allomorph A	***-Ø-*** + allomorph B	egophoric past, inferential allophoric past
7	– + allomorph A	***-ɛ-*** + allomorph B	– + allomorph A	imperative

Examples (1) through (1) below illustrate morphological pattern 1 for the present tense forms of the verb *bjak-men* 'to hide', *lok-ɛ-um* 'to climb up', and *jok-tɛ-um* 'to buy'.[2] Examples for each morphological pattern can be found in the appendix of this article.

(1) a. Intransitive class: *bjak-men* 'to hide'
*bjak-**k**-ek*
hide-**INTR**-PRS.EGO.SG
'I am hiding myself.' (Widmer, fieldnotes)

b. Middle class: *lok-ɛ-um* 'to climb up'
*lok-**ɛ**-ek*
climb-**MID**-PRS.EGO.SG
'I am climbing up.' (Widmer, fieldnotes)

[2] Throughout the paper, Bunan verbs are given in their infinitive form, which either ends in *-men* (for verbs belonging to the intransitive class) or *-um* (for verbs belonging to the middle and transitive class).

c. Transitive class: *jok-tɛ-um* ‘to buy’

*jok-**tɛ**-ek*

buy-**TR**-PRS.EGO.SG

‘I am buying (something).’ (Widmer, fieldnotes)

3.2.2 Functional motivation

My lexical database for Bunan comprises a total of 474 verbs, of which 156 (32.9%) belong to the intransitive class, 52 (11%) to the middle class, and 266 (56.1%) to the transitive class. Table 3 below gives an overview of the three transitivity classes by specifiying how many monovalent and plurivalent verbs each class contains.[3]

Table 3: Monovalent and plurivalent verbs across the three transitivity classes

	Monovalent		**Plurivalent**		**Total**	
	n	**%**	**n**	**%**	**n**	**%**
TR	0	0	266	100	266	100
MID	43	82.7	9	17.3	52	100
INTR	124	79.5	32	20.5	156	100

As Table 3 illustrates, there is a certain correlation between transitivity class membership and valence in the sense that transitive verbs are exclusively plurivalent, while intransitive and middle verbs tend to be monovalent. The correlation is not perfect, however, as the intransitive and middle classes contain a substantial number of plurivalent verbs.[4] Accordingly, the functional motivation that underlies Bunan transitivity classes cannot be adequately captured with a binary syntactic notion of transitivity, as we would then expect a perfect correlation between between transitivity class membership and valence. The assignment of individual verbs to transitivity classes can be accounted for in a more adequate manner with a scalar semantic notion of transitivity. Under such an approach, a Bunan verb’s transitivity class membership is not seen as a direct function of its number of core arguments but rather as reflecting its relative position on a transitivity continuum. Since the early 1980s, various scholars have proposed models that revolve around such continua. The best-known of these proposals are Hopper & Thompson (1980), Givón (2001), and Næss (2007). It would go beyond the scope of this article to offer a detailed comparative account of these different approaches (see

[3] Each Bunan verb stem is a genuine member of one of the three transitivity classes, but may change its transitivity class through derivational processes (see Widmer 2017a: 400–403 for a discussion of the relevant processes). Table 3 only takes into account genuine transitivity class membership.

[4] A reviewer points out that in traditional linguistics the term “intransitive” is commonly used to refer to one-participant events only, raising the question of whether it would not be more appropriate to use the labels “low transitivity” and “high transitivity” for the transitivity classes that are here referred to as “intransitive” and “transitive”. However, this terminological approach is not free of problems either. As demonstrated in this section, the transitive class comprises verbs with a comparatively low degree of transitivity (e.g. *lwat-tɛ-um* ‘to forget’), while the intransitive class contains verbs with a comparatively high degree of transitivity (e.g. *riŋ-men* ‘to say (to a speech act participant)’). The labels “low transitivity” and “high transitivity” are thus not necessarily better.

Kittilä 2010 for this purpose). Suffice it to say that they all revolve around the notion of a prototype transitive event, which is associated with a maximal degree of transitivity. The prototype transitive event has been defined in different ways by the abovecited scholars, but it is possible to abstract a generalized definition from their individual accounts. According to this definition, the prototype transitive event involves a volitionally acting and instigating agent that acts on a specific and fully affected patient, with agent and patient representing clearly distinguishable participants. Any deviation from this prototype is associated with a decrease in transitivity. Emanating from these considerations, each transitivity class is briefly characterized in the following (see Widmer 2017a: 403–414, 420–428 for a more detailed discussion).

The transitive class comprises bivalent verbs (e.g. *lik-tɛ-um* 'to make', *tup-tɛ-um* 'to cut') as well as trivalent verbs (e.g. *da-tɛ-um* 'to give, *lot-tɛ-um* 'to say (to a non-speech act participant)'), but no monovalent verbs. Accordingly, all of the relevant verbs display a relatively high degree of transitivity in the sense that they involve at least two participants. At the same time, there are bivalent verbs in the transitive class that deviate from the prototype transitive event in various ways. An example in case is the verb *lwat-tɛ-um* 'to forget', whose agent argument does not act volitionally and whose patient argument is not physically affected by the relevant event. An another example is the verb *ts^{h}or-tɛ-um* 'to feel', which takes an experiencer and a stimulus argument rather than an agent and patient argument. The relevant event is thus characterized by a "bidirectional transmission of force" (Croft 2012: 233), with both participants affecting each other at the same time.

The intransitive class predominantly comprises verbs with one core argument (*el-men* 'to go', *ɛwan-men* 'to rest'), but also includes a certain amount of verbs with two or three core arguments (*dza-men* 'to eat', *riŋ-men* 'to say (to a speech act participant)'). The plurivalent verbs of the intransitive class are generally characterized by a reduced degree of transitivity in relation to the prototype transitive event. In the case of verbs like *dza-men* 'to eat', *tuŋ-men* 'to drink', or *pant-men* 'to spin', the reduced degree of transitivity is related to the fact that the relevant verbs are often construed as activity verbs with non-referential patient arguments. As Van Valin & LaPolla (1997: 149) argue, non-referential patient arguments of activity verbs serve the primary purpose of characterizing an action, but do not refer to specific affected referents. The notion of "patient affectedness" is thus of secondary importance in such contexts, which in turn means that the transitivity of the construction is reduced. In the case of the ingestive verbs *dza-men* 'to eat' and *tuŋ-men* 'to drink', there is an additional explanation for their intransitive morphology. As Næss (2009: 40) points out, ingestive verbs denote events that affect the agent and the patient argument at the same time. Accordingly, ingestive verbs are characterized by a "lower degree of participant distinctness". Note, however, that the intransitive class also contains plurivalent verbs like *riŋ-men* 'to say (to a speech act participant)', whose membership in this transitivity class is difficult to explain in terms of reduced of transitivity, the more so as the closely related verb *lot-tɛ-um* 'to say (to a non-speech act participant)' belongs to the transitive class.

The middle class mostly comprises verbs with one core argument (e.g. *amt-ɕ-um* ‘to walk’, *ɕit-ɕ-um* ‘to die’), but also contains a number of verbs with two core arguments (*kurt-ɕ-um* ‘to carry (a load), *dur-ɕ-um* ‘to compete with so.’). The verbs that belong to the middle class are generally characterized by “middle semantics”, a concept that is notoriously difficult to define, but is tightly linked to phenomena like reciprocity, reflexivity, and self-affectedness.[5] These notions are associated with a reduced distinguishability between agent and patient, which corresponds to a deviation from the prototype transitive event and hence a decrease in transitivity.[6]

As the preceding discussion illustrates, it is not possible to describe transitivity class membership of Bunan verbs in terms of a straightforward set of rules. It is possible to give a general functional characterization for each transitivity class, but it is not possible to come up with clear and unambiguous criteria that would correctly predict transitivity class membership for every verb. As a consequence, verbs with very similar meanings may belong to different transitivity classes, as in the case of the verb pairs *riŋ-men* ‘to say (to a speech act participant)’ vs. *lot-tɕ-um* ‘to say (to a non-speech act participant)’), *tant-men* ‘to see’ (verb stem for non-past contexts) vs. *tʰaŋ-tɕ-um* ‘to see’ (verb stem for past contexts), or *dat-men* ‘to fall from a height’ vs. *brant-ɕ-um* ‘to fall from a standing position’. As these cases demonstrate, transitivity class membership in Bunan is essentially a matter of construal.

4 Diachronic perspective

4.1 Transitivity classes in eastern WH languages

Bunan is not the only language within WH that groups verbs into different transitivity classes. Transitivity classes have also been described for two other eastern WH languages, i.e. Rongpo (Zoller 1983: 49) and Darma (Willis 2007: 328–329, 346–359).[7] In addition, Byangsi and Rangkas appear to have a similar transitivity system as well. In any case, this is suggested by the verbal paradigms provided by Sharma (2007: 55–63) and Konow (Grierson 1909: 479–486, 556–566), even though the two authors do not explicitly mention the existence of transitivity classes.[8] Chaudangsi most probably

[5] According to Kemmer (1993: 208), these notions are essentially manifestations of the more fundamental principle of “relative elaboration of events”, which she defines as “the degree to which the facets in a particular situation, i.e. the participants and conceivable component subevents in the situation, are distinguished”.

[6] It would go beyond the scope of this paper to offer an exhaustive description of the semantic domains that are associated with middle marking in Bunan. See Widmer (2017a: 408–419) for discussion.

[7] Zoller (1983: 49) does not state whether the transitivity distinction in Rongpo is based on a syntactic or semantic notion of transitivity. Willis (2007) is more explicit with regard to Darma, stating that “[t]ransitive verbs have more than one argument, while intransitive verbs have one argument” (328). This statements implies that the relevant distinction is based on a binary syntactic notion of transitivity. However, Willis’ grammar contains several instances of bivalent verbs that belong to the intransitive class. This suggests that the transitivity system of Darma is based on a semantic scalar notion of transitivity after all (see § 4.1.1 below).

[8] Sharma (2007: 59–61) analyzes the Byangsi transitive and intransitive markers as an “aspectivizer” and a “present stem formative suffix”, respectively. Konow does not analyze the corresponding Rangkas markers as separate morphemes at all. Still, there can be little doubt that the relevant morphemes encode a transitivity distinction. First, they are clearly cognate with the transitivity markers found in Darma. Second, their distribution across monovalent and plurivalent verbs is consistent with this analysis.

displays a similar system of transitivity classes as well. However, the data provided by Krishan (2001) do not allow us to draw any reliable conclusions at this point. Sunnami, finally, also displays a transitivity distinction in certain grammatical contexts. However, the transitivity system of the language appears to be less pervasive than in other eastern WH languages. The Sunnami material that I collected during a two-weeks fieldtrip in summer 2016 suggests that the transitivity distinction is only found in active participles and possibly future tense constructions, but further research is needed to confirm this.

The following comparative discussion primarily focuses on languages for which comprehensive grammatical descriptions are available, viz. Bunan (Widmer 2017a), Rongpo (Zoller 1983), Darma (Willis 2007), and Byangsi (Sharma 2007). In what follows, I first describe the intransitive and transitive classes (§ 4.1.1), then go on to describe the middle class (§ 4.1.2), before discussing the pervasiveness of the transitivity distinction from a comparative perspective (§ 4.1.3).

4.1.1 The intransitive and transitive classes

The following table compares the morphological structure of intransitive and transitive verbs in Bunan, Rongpo, Darma, and Byangsi. Note that the morphological segmentation and glossing of the Rongpo, Darma, and Byangsi verb forms represent my personal analysis and do not necessarily reflect the analysis of the respective authors.

Table 4: Present tense forms of the intransitive class in eastern WH languages

	Bunan[9]	**Rongpo**	**Darma**	**Byangsi**
1SG	*ra-**k**-ek* come-**INTR**-PRS.EGO.SG	*bwəl-**k**-əṅ* camp-**INTR**-PRS.1SG	*ra-**h**-i* come-**INTR**-PRS.1SG	*ra-**g**-ɛ* come-**INTR**-PRS.1SG
2SG	*ra-**k**-ana* come-**INTR**-PRS.2SG	*bwəl-**k**-ən* camp-**INTR**-PRS.2SG	*ra-**h**-en* come-**INTR**-PRS.2SG	*ra-**g**-ṇɔ* come-**INTR**-PRS.2SG
3SG	*ra-**k**-are* come-**INTR**-PRS.ALLO.SG	*bwəl-**k**-ən* camp-**INTR**-PRS.3SG	*ra-**ni*** come-**INTR**.PRS.3	*ra-**g**-an* come-**INTR**-PRS.3SG
1PL	*gwaŋ-**k**-ʰek* come.PL-**INTR**-PRS.EGO.PL	*bwəl-**k**-əni* camp-**INTR**-PRS.PL	*ra-**h**-en* come-**INTR**-PRS.1PL	*ra-**g**-ŋyɛ* come-**INTR**-PRS.1PL
2PL	*gwaŋ-**k**-ʰakni* come.PL-**INTR**-PRS.2PL	*bwəl-**k**-əni* camp-**INTR**-PRS.PL	*ra-**h**-en(i)* come-**INTR**-PRS.2PL	*ra-**g**-ṇi* come-**INTR**-PRS.2PL
3PL	*gwaŋ-**k**-ʰak* come.PL-**INTR**-PRS.ALLO.PL	*bwəl-**k**-əni* camp-**INTR**-PRS.PL	*ra-**ni*** come-**INTR**.PRS.3	*ra-**g**-ṇan* come-**INTR**-PRS.3PL

[9] Note that the person agreement system of Bunan has been transformed into an egophoricity system in the recent past. Egophoric and allophoric forms etymologically correspond to first and third person forms, respectively. See Widmer (2015, 2017a: 502–505, 2017b) and Widmer & Zemp (2017) for a more detailed discussion of the relevant diachronic processes.

Table 5: Present tense forms of the transitive class in eastern WH languages

	Bunan	Rongpo[10]	Darma	Byangsi
1SG	*lik-**tɕ**-ek* do-**TR**-PRS.EGO.SG	*kaṭ-**c**-əṅ* cut-**TR**-PRS.1SG	*ga-**d**-i* do-**TR**-PRS.1SG	*šuŋ-**t**-ɔ* do-**TR**-PRS.1SG
2SG	*lik-**tɕ**-ana* do-**TR**-PRS.2SG	*kaṭ-**c**-ən* cut-**TR**-PRS.2SG	*ga-**d**-en* do-**TR**-PRS.2SG	*šuŋ-**t**-aṇɔ* do-**TR**-PRS.2SG
3SG	*lik-**tɕ**-are* do-**TR**-PRS.ALLO.SG	*kaṭ-**c**-ən* cut-**TR**-PRS.3SG	*ga-**d**-a* do-**TR**-PRS.3	*šuŋ-**t**-a* do-**TR**-PRS.3SG
1PL	*lik-**tɕ**-^{h}ek* do-**TR**-PRS.EGO.PL	*kaṭ-**c**-ini* cut-**TR**-PRS.PL	*ga-**d**-en* do-**TR**-PRS.1PL	*šuŋ-**t**-aŋye* do-**TR**-PRS.1PL
2PL	*lik-**tɕ**-^{h}akni* do-**TR**-PRS.2PL	*kaṭ-**c**-ini* cut-**TR**-PRS.PL	*ga-**d**-en(i)* do-**TR**-PRS.2PL	*šuŋ-**t**-aṇi* do-**TR**-PRS.2PL
3PL	*lik-**tɕ**-^{h}ak* do-**TR**-PRS.ALLO.PL	*kaṭ-**c**-ini* cut-**TR**-PRS.PL	*ga-**d**-a* do-**TR**-PRS.3	*šuŋ-**t**-aṇan* do-**TR**-PRS.3SG

As the tables given above demonstrate, present tense forms display a similar morphological structure in all four languages. Admittedly, one might object that the verb forms in Rongpo, Darma, and Byangsi have been segmented so as to make them correspond to the morphological structure of the corresponding Bunan forms. However, the similarities between the different languages are not limited to morphological structure, but also extend to phonological form. The intransitive class markers *-k* in Bunan, *-k* in Rongpo, and *-g* in Byangsi are clearly cognate, and the corresponding morpheme *-h* in Darma most probably goes back to a velar suffix **-k* as well.[11] In the case of the transitive class, the situation is more complex. The transitive markers *-tɕ* in Bunan and *-c* in Rongpo are clearly etymologically related, and the same is true for the transitive marker *-d* in Darma and *-t* in Byangsi. However, it is not clear whether the affricates *-tɕ* and *-c* attested in Bunan and Rongpo are related to the stop morphemes *-d* and *-t* found in Darma and Byangsi. This question will be taken up again in § 4.3 below, where the etymology of these markers will be discussed.

The transitivity classes of Bunan, Rongpo, Darma and Byangsi are not only similar in terms of their morphosyntactic encoding but also regarding the verbs that they comprise. The intransitive class in Rongpo and Darma not only comprises monovalent verbs, but also contains verbs that exhibit two core arguments. Zoller (1983: 66) reports that the bivalent verbs *jəpəṅ* 'to eat' and *tũpəṅ* 'to drink' belong to the intransitive class, and the data discussed by Willis (2007: 330–331) suggests that the verbs *jamu* 'to eat' and *tuŋmu* 'to drink' pertain to the intransitive class as well. Moreover, the verb *dza:mo* 'to eat' in Byangsi also belongs to the intransitive class (cf. Sharma 2007: 56). Remember that

[10] Zoller (1983) uses the letter <*c*> to transliterate an alveo-palatal affricate */tɕ/*.
[11] This appears especially plausible given the fact that the morpheme is realized as *[-k^{h}i]* in certain grammatical contexts (Willis 2007: 119–120).

the verbs *dza-men* ‘to eat’ and *tuŋ-men* ‘to drink’ are part of the intransitive class in Bunan as well. This suggests that the transitivity systems of Rongpo, Darma, and Byangsi – like the transitivity system of Bunan – do not assign verbs to a transitivity class based on their valence but based on a scalar semantic notion of transitivity (see § 3.2.2).

4.1.2 The middle class

The data that have been discussed so far demonstrate that the intransitive and transitive classes of Bunan have clear formal and functional equivalents in the closely related languages Rongpo, Darma, and Byangsi. This gives rise to the question of whether these three languages also display a middle class. Indeed, middle marking has been described for all three languages (Zoller 1983: 49–50; Willis 2007: 364–369; Sharma 2007: 61–62).[12] The following table contrasts middle forms with intransitive and transitive forms in Bunan, Rongpo, Darma, and Byangsi.

Table 6: Middle marking in eastern WH

	Bunan	**Rongpo**	**Darma**	**Byangsi**
	*el-**k**-ek*	*bwəl-**k**-əṅ*	*dee-**h**-i*	*ra-**g**-ɛ*
INTR	go-**INTR**-PRS.EGO.SG	camp-**INTR**-PRS.1SG	go-**INTR**-PRS.1SG	come-**INTR**-PRS.1SG
	‘I am going.’	‘I am camping.’	‘I am going.’	‘I am coming.’
	*su-**ɕ**-ek*	*kyaː-**s**-**k**-əṅ*	*ur-**si**-**h**-i*	*ruŋ-**ši**-**g**-ɛ*
MID	wash-**MID**-PRS.EGO.SG	hide-**MID**-**INTR**-PRS.1SG	wash-**MID**-**INTR**-PRS.1SG	listen-**MID**-**INTR**-PRS.1SG
	‘I am washing myself.’	‘I am hiding myself.’	‘I am washing myself.’	‘I am listening.’
	*su-**tɕ**-ek*	*kaṭ-**c**-əṅ*	*ur-**d**-i*	*šuŋ-**t**-ɔ*
TR	wash-**TR**-PRS.EGO.SG	cut-**TR**-PRS.1SG	wash-**TR**-PRS.1SG	do-**TR**-PRS.1SG
	‘I am washing (so.).’	‘I am cutting (sth.).’	‘I am washing (so.).’	‘I am doing (sth.).’

As the table demonstrates, the Bunan middle class marker *-ɕ* has clear cognates in Rongpo *-s*, Darma *-si*, and Byangsi *-ši*. However, Rongpo, Darma, and Byangsi do not possess a distinct middle class like Bunan. Rather, middle verbs are members of the intransitive class and exhibit an additional middle marker, which is inserted between the verb stem and the intransitive marker. This observation provides interesting insights into the historical status of the middle class in Bunan. The comparative evidence from Rongpo, Darma, and Byangsi suggests that “middle verbs” in Bunan originally merely represented a subclass of the intransitive verb class. Accordingly, the modern verb form *su-ɕ-ek* ‘wash-MID-PRS.EGO.SG’ must go back to a form **su-ɕ-k-ek* ‘*wash-MID-INTR-PRS.EGO.SG’. Middle verbs only acquired the status of a separate transitivity class in Bunan when a sound change caused the loss of the intransitive marker *-k* after the middle marker *-ɕ*.

Comparative evidence thus suggests that the threefold transitivity distinction of contemporary Bunan can be traced back to a binary distinction between an intransitive and a transitive verb class.

[12] Note that only Willis (2007) refers to the respective category as “middle”, whereas Zoller (1983) and Sharma (2007) use the terms “passive” and “mediopassive”.

This binary system is still attested in Rongpo, Darma, and Byangsi, where transitivity marking and middle marking manifest themselves as morphologically independent subsystems. Since the binary transitivity distinction between an intransitive and a transitive class is clearly primary from a historical perspective, the remainder of the discussion will primarily focus on the distinction between these two classes.

4.1.3 The pervasiveness of the transitivity distinctions

The data discussed in the preceding subsection demonstrates that the system of transitivity distinctions is not equally complex in all eastern WH languages. Rongpo, Darma, and Byangsi exhibit a binary transitivity distinction between an intransitive and a transitive verb class, whereas Bunan makes a threefold distinction between an intransitive, a middle, and a transitive verb class. However, the transitivity systems of the four languages do not only vary in terms of the number of transitivity classes that they comprise, but also in terms of their pervasiveness across different constructions. The data available for Bunan, Rongpo, Darma, and Byangsi suggest that the transitivity distinctions are not equally pervasive in the four languages. This is illustrated in Table 7, which lists five selected constructions and indicates whether they distinguish between an intransitive and a transitive class: present tense (PRS), past tense (PST), future tense (FUT), active participle (ACT), and infinitive (INF).

Table 7: Presence of a transitivity distinction in selected constructions

Construction	Rongpo	Darma	Byangsi	Bunan
PRS	yes	yes	yes	yes
PST	yes	yes	yes	yes
FUT	no	yes	yes	yes
ACT	no	no	yes	yes
INF	no	no	no	yes

As Table 7 illustrates, Rongpo only distinguishes between an intransitive and a transitive class in the present and past tense (Zoller 1983: 66, 68) but not in the future tense (69), the active participle (54), or the infinitive (46–47). Darma differentiates between an intransitive and a transitive verb class in past, present, and future tense constructions (cf. Willis 2007: 352–359, 387–389). In infinitives and active participles, there is no evidence for such a distinction (359–362, 501–504). In the case of Byangsi, the situation is difficult to assess, as Sharma (2007) does not provide full paradigms for the transitive class. However, the available data suggests that the distinction between intransitive and transitive verb classes can be found in past, present, and future tense constructions as well as in active participles (Sharma 2007: 55–63, 69–70), but is absent from infinitives (54–55). Bunan, finally, distinguishes between intransitive and transitive verb forms in all five types of constructions (Widmer 2017a).

The four languages thus vary considerably with regard to the pervasiveness of transitivity distinctions across different constructions. This in turn suggests that the pervasiveness of transitivity distinctions in individual languages has been subject to a substantial amount of change. Based on the comparative data currently avaible, it is not possible to reconstruct the original distribution of the transitivity system with any certainty. The data given in Table 7 suggests that Proto-Eastern West Himalayish (PEWH) at least displayed a transitivity distinction in present and past tense constructions, possibly also future tense constructions. However, further comparative research is needed to explore the historical dynamics of the relevant transitivity distinctions in more detail.

4.1.4 The diachronic origins of the transitivity classes

Based on the evidence discussed in the preceding paragraphs, we can reconstruct a binary transitivity distinction between an intransitive class marked with the morpheme *-*k* and a transitive class marked by the morphemes *-*tɛ* and / or *-*t* for PEWH. The morphological template of the present tense construction can be reconstructed as follows.

Figure 4: Reconstructed present tense construction for PEWH

VERB STEM – MIDDLE – TRANSITIVITY – TAME / AGREEMENT

The question now is whether synchronic evidence from eastern WH languages allows us to shed more light on the history of the transitivity distinction and to identify potential origins of the transitivity markers. In the case of the intransitive marker *-*k*, one might speculate whether this morpheme goes back to the Proto-West Himalayish (PWH) converb marker *-*ka*, which is reflected by the imperfective converb marker -*ka* in Bunan (see Widmer 2017a: 437–438), the perfective converb -*ka* in Sunnam (Widmer, fieldnotes), the imperfective converb marker -*ka* in Rongpo (Zoller 1983: 56–57), and the perfective converb marker -*khɛ* in Byangsi (Sharma 2007: 67–68). This hypothesis exclusively rests on the phonological similarity between the individual morphemes and cannot be backed up with additional evidence from eastern WH languages. However, as is argued in § 4.3, the diachronic link between these morphemes appears plausible in the light of evidence from western WH languages. As for the transitive markers *-*tɛ* / *-*t*, I am not aware of any morphemes in eastern WH languages that could be possible sources of the relevant markers.

4.2 Transitivity classes beyond eastern WH

As the synchronic evidence considered so far does not allow us to reconstruct the history of transitivity classes in detail, we are forced to broaden the perspective of our study and look for comparative evidence beyond the eastern branch of WH. The following subsections discuss the transitivity markers of eastern WH languages from a broader comparative perspective and go into the question of whether there is evidence for similar transitivity classes in the western branch of WH (§ 4.2.1) or in other subgroups of the TB language family (§ 4.2.2).

4.2.1 Evidence for transitivity classes in western WH

The following table gives an overview of verbal morphology in the western WH languages Manchad, Standard Kinnauri, and Shumcho for a monovalent verb and a bivalent verb. The table gives first person present tense forms for Manchad (Sharma forthcoming), Tinan (Francke 1909), Standard Kinnauri (Widmer, fieldnotes) and first person future forms for Shumcho (Widmer, fieldnotes).[13]

Table 8: Evidence for transitivity distinctions in western WH

Manchad	**Tinan**	**Standard Kinnauri**	**Shumcho**
*a-**p**-aːta-g*	*am-**p**-ato-^{g}*	*bi-to-k*	*tu-ro-k*
come-**?**-PRS-1SG	come-**?**-PRS-1SG	go-PRS-1SG	come-FUT-1SG
'I am coming.'	'I am coming.'	'I am going.'	'I will come.'
*al-**dz**-aːta-g*	*al-**ts**-ato-^{g}*	*an-to-k*	*su-ro-k*
open-**?**-PRS-1SG	open-**?**-PRS-1SG	raise-PRS-1SG	wash-FUT-1SG
'I am opening (sth.).'	'I am opening (sth.).'	'I am waking up (so.).'	'I will wash (so.).'

As the table illustrates, Standard Kinnauri and Shumcho, which both belong to the Kinnaur subgroup of western WH, do not distinguish between intransitive and transitive verb classes in the relevant constructions, and I have not found any evidence for the existence of a morphological distinction between an intransitive and a transitive class in any other part of the verbal domain. The limited material that is available for other members of the Kinnaur subgroup (Kanashi, Lower Kinnauri, Chitkhuli) suggests that the situation is similar for these languages.

The situation is different for the languages belonging to the Lahaul subgroup, i.e. Manchad and Tinan. Both languages display "conjugational" morphology that is reminiscent of the intransitive-transitive distinction found in eastern WH languages. Table 8 above exemplifies this for present tense constructions of the two languages. As the table illustrates, the monovalent verb stem *a(m)-* 'come' takes the conjugational morpheme *-p* in the present tense, while the plurivalent verb stem *al-* 'open' takes the conjugational morpheme and *-dz* / *-ts* (see Sharma forthcoming; Francke 1909). Based on the evidence presented in Table 8, one thus might conclude that Manchad and Tinan also make a morphological distinction between an intransitive and a transitive verb class.

However, on closer examination, it becomes clear that there are important differences between the conjugational morphology of Manchad and Tinan and the transitivity morphology of eastern WH languages. Consider Table 9, which lists infinitives and first person forms of selected tenses for the monovalent verbs *api* 'to come', *dàphi* 'to fall', and *rwàldzi* 'to doze' as well as the bivalent verbs

[13] Francke (1909) uses the superscript letter <^{g}> to write an unreleased syllable-final velar plosive.

aldzi ‘to open’, *tèŋdzi* ‘to beat’, and *kyurpi* ‘to thrash’ in Manchad (all data from Sharma forthcoming).[14]

Table 9: Conjugational morphology of selected Manchad verbs

Infinitive	**Present (1SG)**	**Past (1SG)**	**Future (1SG)**
*a-**p**-i*	*a-**p**-aːta-g*	*a-**r**-i-ga*	*a-**p**-oː-g*
come-?-INF	come-?-PRS-1SG	come-?-PST-1SG	come-?-FUT-1SG
‘to come’	‘I am coming.’	‘I came.’	‘I will come.’
*dà-**ph**-i*	*dà-**p**-aːta-g*	*dà-**d**-i-ga*	*dà-**p**-oː-g*
fall-?-INF	fall-?-PRS-1SG	fall-?-PST-1SG	fall-?-FUT-1SG
‘to fall’	‘I am falling.’	‘I fell.’	‘I will fall.’
*rwàl-**dz**-i*	*rwàl-**dz**-aːta-g*	*rwàl-**dz**-i-ga*	*rwàl-**dz**-oː-g*
doze-?-INF	doze-?-PRS-1SG	doze-?-PST-1SG	doze-?-FUT-1SG
‘to doze’	‘I am dozing.’	‘I dozed.’	‘I will doze.’
*al-**dz**-i*	*al-**dz**-aːta-g*	*al-**Ø**-i-ga*	*al-**b**-oː-g*
open-?-INF	open-?-PRS-1SG	open-?-PST-1SG	open-?-FUT-1SG
‘to open’	‘I am opening (sth.).’	‘I opened (sth.).’	‘I will open (sth.).’
*tèŋ-**dz**-i*	*tèŋ-**dz**-aːta-g*	*tèŋ-**r**-i-ga*	*tèŋ-**m**-oː-g*
beat-?-INF	beat-?-PRS-1SG	beat-?-PST-1SG	beat-?-FUT-1SG
‘to beat’	‘I am beating (sth.).’	‘I beat (sth.).’	‘I will beat (sth.).’
*kyur-**p**-i*	*kyur-**p**-aːta-g*	*kyur-**t**-i-ga*	*kyur-**p**-oː-g*
thrash-?-INF	thrash-?-PRS-1SG	thrash-?-PST-1SG	thrash-?-FUT-1SG
‘to thrash’	‘I am trashing (grains).’	‘I trashed (grains).’	‘I will trash (grains).’

The data presented in Table 9 is not consist with an analysis of *-dz* and *-p* as markers of transitive and intransitive verbs. First, there are some monovalent verbs that take the marker *-dz* in their present tense form. Second, there are some plurivalent verbs that exhibit the marker *-p* in their present tense form. Third, the morphological opposition disappears in past tense and future tense constructions, in which all verbs except for *rwàl-dz-i* ‘to doze’ take the marker *-t* ~ *-d* ~ *-r* or the marker *-p* ~ *-b* ~ *m*. This suggests that the conjugational morphemes of Manchad cannot be characterized as transitivity markers in the strict sense of the word. Rather, they appear to be a partially transitivity-sensitive, idiosyncratic feature of individual verb stems. This is in line with Sharma’s (forthcoming) analysis, who describes them as “verb stem alternations”.

Another aspect that distinguishes the conjugational markers of Manchad and Tinan from the transitivity markers in eastern WH is the etymological transparency of the relevant morphemes in Manchad and Tinan. Most of the conjugational markers can be traced back to nonfinite verbal endings that are synchronically attested in at least one of the two languages. The conjugational marker *-p* (and

[14] The letters <*c*> and <*j*> represent the alveo-palatal affricates */tɕ/* and */dʑ/*, while the letter <*y*> represents the palatal glide */j/*. The diacritic < ̀ > marks a falling tone.

allophoric variants thereof) goes back to an imperfective converb *-pa*, which is attested in both Manchad (Sharma 1989a: 149–150) and Tinan (Sharma 1989b: 170). The conjugational marker *-dz* (and allophoric variants thereof), in turn, is derived from a present participle ending *-dza*, which is attested in Manchad (see Sharma 1989a: 149). The conjugational marker *-t* (and allophoric variants thereof) is the only morpheme that cannot be linked to a synchronically attested nonfinite verb form in Manchad or Tinan. The tense morphemes that follow the conjugational markers can in turn be traced back to cliticized copulas or auxiliary verbs. This is most obvious in the case of the present tense morpheme *-(aː)ta-* / *-(a)to-*, which is a reflex of the existential copula *to-* (see Francke 1909: 80). In the case of the transitivity class markers of eastern WH languages, internal reconstruction does not allow us to trace back the relevant morphemes to periphrastic constructions.

These considerations suggest that the verb stem alternations encountered in Manchad and Tinan are independent developments and are not directly connected to the transitivity class system of eastern WH languages. To be sure, one might speculate whether the morpheme *-dz* in Manchad and the transitivity markers *-tɛ* / *-c* in Bunan and Rongpo are cognate. However, this seems unlikely for two reasons. First, an etymological connection between an alveo-dental affricate in Manchad and an alveo-palatal affricate in Bunan would go against regular sound correspondences.[15] Second, the etymological transparency of the Manchad present tense forms suggests that they are considerably younger than the corresponding eastern WH constructions, whose source cannot be identified with the help of internal reconstruction.

In the end, we cannot rule out the possibility that there may be some deep historical connection between the transitivity markers attested in eastern WH and the conjugational morphology encountered in Manchad and Tinan. For example, it would be possible that Manchad and Tinan have developed their conjugational morphology because of longstanding contact with Bunan. At the same time, it is also conceivable that the conjugational morphology of Manchad and Tinan continues a system of transitivity distinctions that was already present in PWH. This, however, would entail (i) that the system has been entirely lost in the languages of the Kinnaur subgroup, (ii) that Manchad and Tinan have recently renewed the transitivity system on the basis of innovative constructions and (iii) that the system is in decay (at least in the case of Manchad), as the distribution of morphemes does no longer fully correlate with the distinction between monovalent and plurivalent verbs.

Based on the data that is currently available, it appears most likely that the verb stem alternations of Manchad and Tinan have either developed independently or due to contact with Bunan. In any case, there is not enough comparative evidence to postulate a transitivity distinction for PWH. Further research is needed to gain a better understanding of how the conjugational morphology of Manchad and Tinan developed.

[15] Alveo-dental and alveo-palatal affricates in Bunan generally correspond to alveo-dental and alveo-palatal affricates in Manchad, e.g. Bunan *tsʰa* ‘salt’ vs. Manchad *tshá:* (Sharma forthcoming) < PTB **tsa* ‘salt’ (Matisoff 2016) and Bunan *tɕʰur-tɛ-um* ‘to squeeze’ vs. Manchad *cur-tshi* ‘to squeeze’ (Sharma forthcoming) < PTB **tsyir* ⩙ **tsyuːr* ‘wring, squeeze’ (Matisoff 2016).

4.2.2 Evidence for transitivity classes outside of WH

As noted earlier, the transitivity distinction that is encountered in Bunan and its closest relatives appears to be rather exceptional from a comparative TB perspective. Still, the question arises whether similar and potentially related systems can be found in other branches of the TB language family. To my knowledge, a comparable system has so far only been described for Rawang, a language of Sichuan that belongs to the Nungish subgroup.[16] In Rawang, verbs are divided into an intransitive class and a transitive class (LaPolla 2011).[17] Consider the following examples.

(2) a. Intransitive class: *shì=ē* 'die'

ngà	*rə̀mnv̄ng-pè*	*gø̄*	*shì*	*bǿ-**ì***
1SG	friend-MALE	also	die	PFV-**INTR**.PST

'My friend also died.' (LaPolla 2011: 637)

b. Transitive class: *yv̀ng-ó=ē* 'see'

rvshà-rì=í	*yv̀ng*	*bǿ-**à***	*kvt*	...
monkey-PL=AGT	see	PFV-**TR**.PST	when	…

'When the monkeys saw (him), … .' (LaPolla 2011: 638)

As examples (2) and (2) illustrate, monovalent verbs have a citation form ending in *=ē* and a past tense form ending in *-ì*, whereas plurivalent verbs have a citation form ending in *-ó=ē* ~ *-ò=ē* and a past tense form ending in *-à.* At first sight, this system appears functionally reminiscent of the transitivity distinction encountered in eastern WH languages. However, on closer examination it becomes clear that the Rawang system differs from the transitivity systems of eastern WH in several respects. First, LaPolla merely reports three predicates that have two core arguments, but belong to the intransitive class: the copula *í=ē*, *mvyǿ=ē* 'want, like', and *vdá=ē* 'have, own'). In all other cases, a verb's transitivity class can apparently be predicted from its number of core arguments. Accordingly, the Rawang transitivity system appears to be primarily based on a binary syntactic rather than a semantic gradual notion of transitivity. Second, one transitivity marker, viz. the transitive classmarker *-ó* ~ *-ò*, simultaneously serves as a person agreement marker. According to LaPolla (2011: 637), the marker *-ó* ~ *-ò* is a non-past third person object marker and commonly appears on all verbs of the transitive class in non-past contexts, e.g. in the citation form *yv̀ng-ó=ē* 'see'. This multifunctionality of transitivity markers is not attested in eastern WH languages (but it may have existed in the past, as I argue in § 4.3 below). Third, Rawang possesses a class of so-called "ambitransitive" verb roots that can both be inflected intransitively or transitively without additional morphological derivation (LaPolla 2011: 638). LaPolla describes two types of ambitransitive verb alternations for Rawang. In the case of the first type, the intransitively inflected verb describes an anticausative event with one

[16] All Rawang data are rendered in Rawang orthography. Note the following conventions: <*v*> = /ə/, <*ø*> = /ɯ/, <*q*> = /ʔ/, <*c*> = /s/, <*á*> = high falling tone, <*ā*> = mid tone, <*à*> = low falling tone.

[17] Note that LaPolla (2011) uses the term "transitivity" and its hyponyms "transitive" and "intransitive" not just to describe the morphological marking of transitivity on verbs but more generally to describe the morphosyntactic properties of clauses. For a Rawang clause to be transitive according to LaPolla, it has to display agentive marking on the agent argument and a transitive verbal ending.

core argument, while the transitively inflected verb describes a causative event with two core arguments, e.g. *gvyaq=ē* 'to be broken, to be destroyed' vs. *gvyaq-ò=ē* 'to break, to destroy'. In the case of the second type, the intransitively inflected verb describes a two-participant activity with a non-referential patient argument as in (3), while the transitively inflected verb describes a two-participant activity with a specific, referential patient argument as in (3).

(3) a. *àng* *pē* *zvt=ē*
3SG basket weave=NPST
'He weaves baskets.' (general of habitual sense) (LaPolla 2011: 638)

b. *àng=í* *pē* *tiq-chv̀ng* *zvt-ò=ē*
3SG=AGT basket one-CL weave-3O.NPST=NPST
'He is weaving a basket.' (LaPolla 2011: 638)

According to current knowledge, the transitivity systems of eastern WH do not display ambitransitive verbs. In these languages, verb roots are genuine members of one transitivity class only and have to undergo certain derivational processes to be assigned to a different transitivity class. Finally, it should be noted that there are no formal similarities between the transitivity markers of Rawang and the transitivity markers of eastern WH languages. It is thus highly unlikely that the two systems have developed from a common source.

4.3 A possible source of the transitivity markers

The evidence discussed in the preceding section suggests that the transitivity markers of eastern WH languages cannot be related to functionally equivalent, cognate morphemes in western WH or other non-WH TB languages. This gives rise to the question of whether there are any other constructions in western WH that might be cognate with the transitivity class markers of eastern WH. Indeed, a potentially cognate construction is attested in the western WH language Standard Kinnauri, which has an object agreement marker that is phonologically reminiscent of the transitive class marker found in Bunan and Rongpo. Consider the following examples.

(4) First / second person object agreement
a. *an-**tɛ**-o-k*
wake.up-**1/2O**-FUT-1A.SG
'I will wake you up.' (Widmer, fieldnotes)
b. *an-**tɛ**-o-na*
wake.up-**1/2O**-FUT-2A.SG
'You will wake me up.' (Widmer, fieldnotes)

Note that similarities are not limited to phonological form. The Standard Kinnauri object marker and the Bunan / Rongpo transitive markers also have a similar morphological position, that is

to say, they occur between the verb root and inflectional endings. In the light of structural considerations, it thus appears possible that the object agreement marker *-tɛ* in Standard Kinnauri and the transitive markers *-tɛ* / *-c* in Bunan and Rongpo are cognate. The question then is whether such a diachronic relation is also conceivable from a functional perspective. Indeed, evidence from Rawang suggests that this connection is plausible. As noted in § 4.2.2, the citation form of Rawang intransitive verbs is formed by attaching the non-past ending *=ē* to the relevant verb root (e.g. *shì=ē* 'to die'), whereas the citation form of transitive verbs is formed by attaching the non-past third person object marker *-ó* ~ *-ò* plus the non-past ending *=ē* (e.g. *yvìng-ó=ē* 'to see'). A citation form of a verb primarily describes an event, but does not involve any specific subject or object argument. Accordingly, the object marker *-ó* ~ *-ò* sometimes occurs in contexts in which it does not serve the function of indexing a specific object argument.

This opens up the possibility for the object marker to be reanalyzed as a marker of transitive verbs in the course of a "metanalysis" (Croft 2000: 130), viz. the swapping of "contextual and inherent semantic values of a syntactic unit." The metanalysis can be explained as follows: An object agreement marker can only occur in combination with predicates that can take an object argument and, accordingly, display a comparatively high degree of transitivity, both from a syntactic and a semantic point of view. A high degree of transitivity is thus a contextual semantic feature of an object agreement marker. If the object agreement marker frequently occurs in contexts in which it does not index a specific object (e.g. in a citation form), its original primary function of indexing the presence of an object argument may gradually become obscured. At the same time, the originally contextual semantic feature of indexing a high degree of transitivity may become more salient and eventually become the primary function of the morpheme.

While this scenario offers a plausible explanation for the reanalysis of a third person object marker as a transitivity marker, it does not explain the origin of the transitive marker in Bunan and Rongpo *-tɛ* / *-c*, which apparently developed from a first / second rather than a third person object marker. A crucial follow-up question thus is why it might have been a first / second rather than a third person object marker that was reanalyzed as a marker of transitivity. After all, speech-act participants are prototypical agents rather than prototypical patients in a two-participant event (see Dixon 1979: 85). This implies that a third person object marker should be more likely to develop into a transitivity marker than a first / second person object marker. A possible explanation for this unexpected development might lie in the way in which object agreement was lost in WH languages. All WH languages for which object agreement has been described only retain object markers that index speech act participants. This is the case in Standard Kinnauri (Takahashi 2001), Shumcho (Huber 2014), and Bunan (Widmer 2017a).[18] This suggests that third person object agreement forms – if they ever existed – were lost early on, leaving the relevant languages only with first / second person object agreement

[18] Note that the Bunan object agreement suffix *-ku-* has been reanalyzed as an undergoer egophoric marker and now indexes the epistemic role of the assertor rather than a grammatical relation (see Widmer 2017a: 471–474, 504).

forms, which were in turn the only object agreement forms amenable to a reanalysis as transitive markers.

Another important question is whether we can also identify a possible origin for the transitive markers *-t / -d*, which are attested in Darma and Byangsi. There appear to be two possible scenarios. First, it is conceivable that the markers *-t / -d* are directly related to the markers *-tɕ / -c*. This scenario presupposes that the transitive markers in Darma and Byangsi underwent a deaffrication at some point in the past. The phonological process of deaffrication has been reported for the WH language Shumcho by Huber (2014: 250–251). Accordingly, it appears conceivable that a similar process might have occurred in Darma and Byangsi.

Second, it is possible that the transitive markers *-t / -d* have a different origin. Under this scenario, it would be sensible to assume that the transitive markers *-t / -d* go back to the same morpheme class as the transitive markers *-tɕ / -c* and originally expressed agreement with an object argument. Accordingly, the question arises whether there are any reflexes of an object marker **-t* ~ **-d* in western WH. Indeed, one could argue that Standard Kinnauri has a third person object suffix *-t* when contrasting the verb form in (5) below with the verb form in (4) above.

(5) Third person object agreement construction

an-to-k	~	*an-**t**-o-k*
wake.up-FUT-1A.SG	~	wake.up-**3O**-FUT-1A.SG

'I will wake her / him up.'

However, there are two problems with this analysis. First, the morpheme sequence *-to-k* is not only attested in combination with plurivalent verbs but also monovalent verbs, e.g. *bi-to-k* [go-FUT-1SG] 'I will go.' (cf.
Table 8). Second, the future morpheme *-to* goes back to a cliticized existential copula *to-*, which is widely attested in western WH languages. This impies that the presumed morpheme boundary between the stop */t/* and the vowel */o/* does not have any diachronic reality, which in turn suggests that the stop */t/* should not be analyzed as an object agreement marker. Accordingly, it appears much more likely that the transitivity markers of eastern WH languages all go back to one transitivity marker **-tɕ*, the reflexes of which underwent deaffrication in the languages of the Pithauragarh subgroup, i.e. Rangkas, Darma, Byangsi, and Chaudangsi.

Finally, we have to address the origin of the intransitive markers of eastern WH languages. It is highly unlikely that these markers derive from object agreement markers, as they predominantly occur on monovalent verbs, which do not usually take morphemes that express agreement with object-like participants. The question thus is whether we can identify another source for these morphemes. As already mentioned in § 4.1.4, the intransitive markers might go back to an old non-finite verbal suffix, possibly the PWH converb suffix **-ka*, whose reflexes can be found in Bunan, Sunnami, Rongpo, and Byangsi. This scenario presupposes that the present tense forms of the modern eastern WH languages

all derive from a formerly periphrastic construction that originally consisted of a non-finite verb form and a copula, but later developed into a synthetic verb form. Given the fact that this process apparently also occurred in Manchad and Tinan (see § 4.2.1) and is frequently attested in TB languages in general (DeLancey 2011), this assumption seems plausible.

The development of the binary transitivity opposition in eastern WH languages could then be explained as follows. At an early stage, PEWH developed a periphrastic construction consisting of a nonfinite converb form and finite copula (COP) with a subject agreement marker (SUBJ) (stage 1). Verbs did not display any transitivity markers at that time, but plurivalent verbs could take the object agreement marker *-tɕ* in at least some grammatical contexts. Subsequently, the periphrastic construction developed into a synthetic construction (stage 2). At some point, the object agreement marker *-tɕ,* which had originally only occurred in combination with first and / or second person objects, was reanalyzed as a transitive marker and began to occur on all verbs that display a high degree of transitivity (stage 3). Finally, the reflex of the converb suffix was lost after the object agreement marker, giving rise to a direct morphological contrast between the morphemes *-k* and *-tɕ*. As the morpheme *-k* now exclusively occurred on monovalent verbs and contrasted with the transitive marker *-tɕ*, it was reanalyzed as an intransitive marker.[19] This scenario is summarized in Table 10.

Table 10: The rise of transitivity distinctions in eastern WH

	Monovalent verbs	**Plurivalent verbs**
Stage 1	**V-ka + COP-SUBJ*	**V(-tɕ)-ka + COP-SUBJ*
	↓	↓
Stage 2	**V-k-SUBJ*	**V(-tɕ)-k-SUBJ*
	↓	↓
Stage 3	**V-k-SUBJ*	**V-**tɕ**-k-SUBJ*
	↓	↓
Stage 4	**V-**k**-SUBJ*	**V-**tɕ**-SUBJ*

Admittedly, the scenario outlined above is speculative. However, it offers a plausible explanation for how eastern WH developed an system of transitivity distinctions. In addition, it is compatible with processes that have been observed elsewhere in the TB language family, viz. (i) the development of

[19] As noted in § 3.2.2 and § 4.1.1, the intransitive classes of Bunan, Rongpo, Darma, and Byangsi also contain a number of bivalent activity verbs that frequently occur with non-referential patient arguments, e.g. 'to eat', 'to drink', etc. It is an open question when and why these verbs were assigned to the intransitive class. Evidence from Rawang (§ 4.2.2) suggests that the relevant verbs might originally have been "ambitransitives", following an intransitive inflectional pattern when occuring with a non-referential patient argument and a transitive inflectional pattern when occuring with a referential patient argument. This scenario would imply that the intransitive inflection of ambitransitives was overgeneralized at some point. However, in the absence of better comparative data, these considerations must remain speculative. More comparative research is needed to gain a better understanding of how the relevant verbs became members of the intransitive verb class.

new synthetic verb forms from periphrastic constructions, which is attested throughout TB (DeLancey 2011), and (ii) the use of object agreement markers in constructions in which they can easily be reanalyzed as transitivity markers, which is attested in Rawang (LaPolla 2011).

5 Conclusion

This paper has described a type of transitivity distinction that is robustly attested in eastern WH languages, but otherwise appears to be rare in TB. The article first briefly described the transitivity system of the eastern WH language Bunan from a synchronic perspective and then discussed it from a historical-comparative perspective. It was demonstrated that similar transitivity systems can be found in other eastern WH languages, although the transitivity distinction of Bunan appears to be both the most complex (distinguishing between three rather than two transitivity classes) and the most pervasive (implementing transitivity distinctions in most finite and non-finite constructions) of all eastern WH languages. It was further shown that reminiscent phenomena can be found in the western WH languages Manchad and Tinan and in the Nungish language Rawang. However, as was argued, the transitivity markers of eastern WH appear not to be etymologically related to the partially transitivity-sensitive conjugational morphology in Manchad and Tinan, nor to the transitivity markers of Rawang. Finally, the paper also sketched a diachronic scenario that explains the diachronic origin of transitivity markers in eastern WH languages. Based on evidence drawn from internal and comparative reconstruction, it was argued that the transitive marker developed from object agreement marker and the morphological reflexes of an old converb marker.

The paper thus offers new perspectives on transitivity in TB languages by describing a lesser-known morphosyntactic manifestation of transitivity and shedding light on its diachronic origins. In addition, the paper makes a contribution to grammaticalization studies by adducing evidence for a grammaticalization pathway from “object agreement marker” to “transitivity marker”, a process that – to my knowledge – has not been described in the literature so far.

At the same time, the paper has touched upon a number of issues that could not be discussed due to lack of space. For example, the historical comparative discussion has primarily focused on the transitivity markers themselves, thereby neglecting the question of how different allomorphs that are conditioned by the presence / absence of transitivity markers came into being. Further research is needed fully understand how the relevant morphological patterns arose and developed in individual languages (see Widmer 2017a: 433 and Widmer 2017b on how allomorphy may have arisen in Bunan infinitives and past tense forms). Further, it is an open question how the grammaticalization pathway “object agreement marker” > “transitivity marker” ties into the broader diachronic typology of transitivity markers. Are object agreement markers a common source for transitivity markers? Or do they only rarely develop in such a way? And, if yes, what are the conditions that favor this development? More synchronic and diachronic research is needed to answer these questions and to

arrive at a more comprehensive understanding of verbal transitivity classes and their diachronic origins in TB languages and beyond.

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7 Appendix: The morphological realization of transitivity distinctions in Bunan

Pattern 1

INTRANSITIVE	**MIDDLE**	**TRANSITIVE**
-k-	*-ɛ-*	*-tɛ-*
*bjak-**k**-are* [*bjaˀkare*]	*lok-**ɛ**-are* [*lɔˀχɛare*]	*jok-**tɛ**-are* [*jɔˀkˇtɛare*]
hide-**INTR**-PRS.ALLO.SG	climb-**MID**-PRS.ALLO.SG	buy-**TR**-PRS.ALLO.SG
'(She / he) is hiding.'	'(She / he) is climbing.'	'(She is) is buying (sth.).'

Pattern 2

INTRANSITIVE	**MIDDLE**	**TRANSITIVE**
–	*-ɛ-*	*-Ø-*
bjak-dza [*bjaˀkˇtsa*]	*lok-**ɛ**-dza* [*lɔˀχsa*]	*jok-**Ø**-dza* [*jɔˀkˇza*]
hide-PST.DIR.ALLO.SG	climb-**MID**-PST.DIR.ALLO.SG	buy-**TR**-PST.DIR.ALLO.SG
'(She / he) hid.'	'(She / he) climbed.'	'(She) bought (sth.).'

Pattern 3

INTRANSITIVE	MIDDLE	TRANSITIVE
–	*-ɕ-*	–
bjak-ka [*bjaˀka*]	*lok-**ɕ**-ka* [*lɔˀχɕa*]	*jok-ka* [*jɔˀka*]
hide-ICVB.SG	climb-**MID**-ICVB.SG	buy-ICVB
‘while hiding’	‘while climbing’	‘while buying’

Pattern 4

INTRANSITIVE	MIDDLE	TRANSITIVE
*-**k**-* + allomorph A	*-**ɕ**-* + allomorph A	*-**Ø**-* + allomorph B
*bjak-**k**-ek* [*bjaˀgɛˀkˇ*]	*lok-**ɕ**-ek* [*lɔˀχɛˀkˇ*]	*jok-**Ø**-kata* [*jɔˀkata*]
hide-**INTR**-FUT.EGO.SG	climb-**MID**-FUT.EGO.SG	buy-**TR**-FUT.EGO.SG
‘(I) will hide myself.’	‘(I) will climb.’	‘(I) will buy (sth.).’

Pattern 5

INTRANSITIVE	MIDDLE	TRANSITIVE
– + allomorph A	*-**ɕ**-* + allomorph B	*-**tɕ**-* + allomorph B
bjak-men [*bjaˀgˇmen*]	*lok-**ɕ**-um* [*lɔˀχum*]	*jok-**tɕ**-um* [*jɔˀkˇtɕum*]
hide-INF	climb-**MID**-INF	buy-**TR**-INF
‘to hide oneself’	‘to climb’	‘to buy’

Pattern 6

INTRANSITIVE	MIDDLE	TRANSITIVE
– + allomorph A	*-**ɕ**-* + allomorph A	*-**Ø**-* + allomorph B
*bjak-**dzi*** [*bjaˀkˇtɕi*]	*lok-**ɕ**-**dzi*** [*lɔˀχɕi*]	*jok-**Ø**-ta* [*jɔˀkˇta*]
hide-PST.INFER.ALLO.SG	climb-**MID**-PST.INFER.ALLO.SG	buy-**TR**-PST.INFER.ALLO.SG
‘(She / he) hid.’	‘(She / he) climbed.’	‘(She) bought (sth.).’

Pattern 7

INTRANSITIVE	MIDDLE	TRANSITIVE
― + allomorph A	**-ɛ-** + allomorph B	― + allomorph A
bjak-a [*bjaˀkˉ*]	*lok-**ɛ**-i* [*lɔˀχɛi*]	*jok-a* [*jɔˀkˉ*]
hide-IMP.SG	climb-**MID**-IMP.SG	buy-IMP.SG
'Hide yourself!'	'Climb!'	'Buy!'

8 Abbreviations

1 – first person, 2 – second person, 3 – third person, A – most agent-like argument, ACT – active participle, AGR – agreement, AGT – agentive, ALL – allative, ALLO – allophoric, CL – classifier, COP – copula, CVB – converb, DAT – dative, DETR – detransitive, DIR – direct evidence, EGO – egophoric, EQ – equative copula, FUT – future, ICVB – imperfective converb, IMP – imperative, INF – infinitive, INFER – inferential evidence, INTR – intransitive, MID – middle, NLZR – nominalizer, NPST – non-past, O – most-patient like argument, PFV – perfective, PL – plural, PRS – present, PST – past, SG – singular, SUP – supine, TR – transitive

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